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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/791,944 | 03/03/2004 | Philip D. Nguyen | 2003-IP-012126U1 | 4140 |

7590

10/19/2006

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EXAMINER

TUCKER, PHILIP C

ART UNIT

PAPER NUMBER

1712

DATE MAILED: 10/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/791,944 | Applicant(s) NGUYEN, PHILIP D. | |
| | Examiner Philip C. Tucker | Art Unit 1712 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24-57 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 24-31, 33-48 and 50-57 is/are rejected.
- 7) ☒ Claim(s) 32 and 49 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>7/7/05, 8/16/05, 9/1/05, 11/7/05, 2/24/06, 5/30/06</u> | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Information Disclosure Statement

Applicant has cited over 500 references, including to such as fertilizers, paper, telemetering, fabrics and chelating agents which do not have any relevance to the currently claimed invention. Applicant is reminded from the **MPEP 2004**:

It is desirable to avoid the submission of long lists of documents if it can be avoided.

Eliminate clearly irrelevant and marginally pertinent cumulative information. If a long list is submitted, highlight those documents which have been specifically brought to applicant's attention and/or are known to be of most significance. See *Penn Yan Boats, Inc. v. Sea Lark Boats, Inc.*, 359 F. Supp. 948, 175 USPQ 260 (S.D. Fla. 1972), *aff'd*, 479 F.2d 1338, 178 USPQ 577 (5th Cir. 1973), cert. denied, 414 U.S. 874 (1974). But cf. *Molins PLC v. Textron Inc.*, 48 F.3d 1172, 33 USPQ2d 1823 (Fed. Cir. 1995).

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 24-28, 30, 31, 34, 36-45, 47, 48, 51 and 53-57 are rejected under 35 U.S.C. 102(b) as being anticipated by Dewprashad (5368102).

Dewprashad teaches a method of consolidating a subterranean zone, utilizing a composition which comprises a resin (column 4, lines 5-23), a hardening agent (column 5, lines 13-34), a hydrocarbon diluent (column 5, line 53), a silane coupling agent (column 7, lines 11-22), and a foaming agent (column 7, line 59), all within the scope of the present invention. The fluid would contain some air naturally (thus including nitrogen), and since a foaming agent is used must contain some gas in order to produce a foam. The composition may be used in fractures as in claim 41 (column 8, lines 17-23). A filler material as in claims 38-40 and 55-57 is included in the composition (column 6, line 59 – column 7, line 10). The hardening agent is also a degradable material, which at the high temperature of the subterranean zone, dissolves and reacts with the epoxy system, forming a hard permeable mass (column 9, lines 1-7).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 24, 29, 35, 41, 46 and 52 rejected under 35 U.S.C. 103(a) as being unpatentable over Dewprashad (5368102).

Dewprashad is discussed above. Dewprashad differs from the present invention in not teaching the amount of hydrocarbon, used or the amount of gas utilized. It would however be obvious to one of ordinary skill in the art to vary the amount of hydrocarbon

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or gas used in the invention of Dewprashad, in order to optimize the functioning of the consolidation and permeability of the resin mass formed therein (In re Boesch 205 USPQ 215, In re Aller 105 USPQ 233).

5. Claims 24, 33, 41 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dewprashad (5368102) in view of Murphey (5128390).

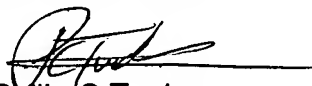
Dewprashad is discussed above. Dewprashad differs in not teaching the amount of foaming agent utilized. Dewprashad at column 7, lines 39-60 teaches that foaming surfactants may be used at levels taught in Murphey (US 5128390). Murphey teaches concentrations within the scope of claims 33 and 50. It would be obvious to utilize the concentration of foaming agents within the scope of Murphey, in the invention of Dewprashad, given the teaching of Dewprashad that such foaming agents and concentrations may be used in the consolidating composition therein.

6. Claims 32 and 49 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip C. Tucker whose telephone number is 571-272-1095. The examiner can normally be reached on Monday - Friday, Flexible schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Philip C Tucker
Primary Examiner
Art Unit 1712

PCT-4054